



Application No. 10/154,203
Attorney Docket No. 032185

Amendment under 37 C.F.R. §1.111
Amendment filed: October 11, 2006

AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in the application.

1-3. (Cancelled)

4. (Currently Amended) The apparatus for continuously forming an FRP square pipe according to claim [[1]] 5, wherein the device for wrapping on the tape-like release film in the circumferential direction and the device for hot-pressing, pulling and holding the prepreg are controlled in a mutually interlocked fashion.

5. (New) An apparatus for continuously forming a fiber reinforced plastic square pipe by molding a semi-cured prepreg material formed by impregnating a thermosetting resin in carbon fiber or glass fiber, the apparatus comprising:

a square rod-shaped core having an outer diameter that is smaller than an inner diameter of the square pipe to be formed and a tapered portion with a diameter size that becomes equal to the inner diameter of the molded product before a hot press, the core supported and fixed at one end thereof;

a device for placing a release film on the surface of the core;

a device for laminating a predetermined number of prepreg sheets sequentially on the release film;

a device for wrapping a tape-like release film in a circumferential direction after the predetermined number of prepreg sheets are laminated;

a device for placing the release film on an outer layer of a laminated prepreg sheets;

a hot press for providing heat and pressure to the prepreg sheets;

a heating furnace for providing additional heating to a hot-pressed prepreg sheets;

a device for discontinuously pulling a formed prepreg square pipe; and

a device for holding a square pipe at hot press;

wherein the device for wrapping the tape-like release film comprises:

a ring-like guide rail disposed on the base;

a rotary ring disposed on a ring-like inner circumference of the guide rail in such a manner that the ring is capable of moving in circling motion;

a driving device of the rotary ring;

a block mounted on the rotary ring;

a reel fixed to the block for feeding the tape-like release film; and

a mechanism for controlling tension places on the tape-like release film being fed;

wherein the tape-like release film can be a stretch film having resistance to heat equal to or higher than a curing temperature of the prepreg being used and generates thermal contraction stress.